

CLAIMS

We claim:

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1. In a telecommunications system including a wireless network having a mobile switching center (MSC) and including a wireline network, the wireline network having a communications network wherein wireline units operating in the communications network
10 may call each other by using wireline extensions rather than wireline directory numbers, the communications network having a communications element with access to a table with wireline entries respectively for the wireline units operating in the communications network, each wireline entry including a wireline extension and a
15 corresponding wireline directory number, a system for including wireless units of the wireless network in the communications network so the wireline units and the wireless units operating in the communications network may call each other by using the wireline extensions or wireless extensions rather than by using the wireline directory numbers or
20 wireless numbers, the system comprising:

A. the table comprising a wireless entry for each of the wireless units operating in the communications network, each wireless entry including a wireless extension and a corresponding wireless number for the wireless unit;

25 B. the communications element being operative to access the table to obtain the corresponding wireless number in response to receipt of the wireless extension in association with a call to the wireless unit,

and the communications element being operative to route the call pursuant to the corresponding wireless number; and

C. the MSC of the wireless network being functionally connected to the communications element, the MSC serving at least one or more wireless units operating in the communications network, the MSC being operative to access the table to obtain, respectively, the corresponding wireless number or wireline directory number in response to receipt of the wireless extension or wireline extension in association with a particular call to the wireless unit or to a wireline unit, and the MSC being operative to route the particular call pursuant to the corresponding wireless number or the corresponding wireline number,

whereby the wireline units and the wireless units operating in the communications network may call each other by using an appropriate wireline extension or an appropriate wireless extension, having the appropriate wireline extension or wireless extension converted respectively to an appropriate wireline directory number or an appropriate wireless number through access of the table by the communications element) or by the MSC, and having the call routed pursuant to the appropriate wireline directory number or the appropriate wireless number.

2. The system of Claim 1, wherein the communications network comprises a Centrex network.

3. The system of Claim 1, wherein the communications element comprises the table.

4. The system of Claim 1, wherein the MSC comprises the table.

5. The system of Claim 1, wherein the communications
5 element and the MSC comprise the table.

6. The system of Claim 1, wherein the communications
element comprises a public branch exchange (PBX), an end office of the
wireline network serving the wireline units operating in the
10 communications network, a service control point (SCP), an intelligent
network element (INE), or an intelligent peripheral (IP).

7. In a communications network including wireline units and wireless units, a communications element accessible for use in providing an extension service to the wireline units and the wireless units operating
5 in the communications network, the extension service allowing the wireline units and the wireless units to call each other by using wireline extensions or wireless extensions rather than wireline directory numbers or wireless numbers, the communications element comprising:

A. a table for use in providing the extension service to the
10 wireline units and the wireless units;

B. the table including a wireline entry for each wireline unit, each wireline entry including a wireline extension and a corresponding wireline directory number; and

B. the table also including a wireless entry for each wireless
15 unit, each wireless entry including a wireless extension and a corresponding wireless number.

8. The network element of Claim 7, wherein the communications element comprises a private branch exchange (PBX), an
20 end office, a mobile switching center (MSC), a service control point (SCP), an intelligent network element (INE), or an intelligent peripheral (IP).

9. In a telecommunications system including a wireless network having wireless units and including a wireline network providing an extension service for qualified wireline units so that the wireline units may call each other by using wireline extensions rather than wireline directory numbers, a table for use in extending the extension service to qualified wireless units so that the qualified wireline units and the qualified wireless units may call each other by using wireline extensions or wireless extensions rather than the wireline directory numbers or wireless numbers, the table comprising:

A. a wireline entry for each qualified wireline unit, each wireline entry including a wireline extension and a corresponding wireline directory number; and

B. a wireless entry for each qualified wireless unit, each wireless entry including a wireless extension and a corresponding wireless number.

10. In a telecommunications system including a wireline network and a wireless network, the wireline network including a communications network wherein wireline units operating in the communications network may call each other by using wireline extensions rather than wireline directory numbers, the communications network having access to a table with an entry for each wireline unit operating in the communications network, each entry including a wireline extension and a corresponding wireline directory number, a method to include a wireless unit of the wireless network in the communications network so a call from a wireline unit operating in the communications network to a wireless unit operating in the communications network may be made by the wireline unit using a wireless extension of the wireless unit rather than a wireless number of the wireless unit, the method comprising:

A. causing the table to include an entry for the wireless unit, the entry including the wireless extension of the wireless unit and a corresponding wireless number of the wireless unit;

B. receiving the wireless extension for the wireless unit in association with the call from the wireline unit to the wireless unit;

C. using the wireless extension to obtain the corresponding wireless number from the entry for the wireless unit in the table; and

D. routing the call pursuant to the corresponding wireless number,

whereby the wireless unit is included in the communications network so the call from the wireline unit operating in the communications network and directed to the wireless extension of the

wireless unit results in the routing of the call to the corresponding wireless number of the wireless unit based on obtaining the corresponding wireless number from the entry for the wireless unit in the table.

11. In a communications network including a wireline network having a wireline unit and a wireless network having a wireless unit, a method to provide a wireless unit with extension service whereby the wireless unit may call the wireline unit by using an extension for the wireline unit rather than a directory number for the wireline unit, the method comprising:

A. causing a table to include an entry for the wireline unit, the entry including the extension of the wireline unit and a corresponding directory number of the wireline unit;

B. receiving the extension for the wireline unit in association with a call from the wireless unit to the wireline unit;

C. using the extension to obtain the corresponding directory number for the wireline unit by checking the entry for the wireline unit in the table; and

D. routing the call to the corresponding wireline directory number,

whereby the wireless unit is accorded the extension service so that a call from the wireless unit to the wireline unit may be made by the wireless unit using the extension of the wireline unit and result in the routing of the call to the corresponding directory number of the wireline unit based on obtaining the corresponding directory number from the entry for the wireline unit in the table.

12. The method of Claim 11, further comprising:

causing the table to include a wireless unit entry for the wireless unit, the wireless unit entry including the extension of the wireless unit

and a corresponding wireless number of the wireless unit, inclusion of the wireless unit entry in the table signifying the wireless unit is to receive the extension service;

5 wherein Action B comprises receiving the wireless number of the wireless unit in association with the call from the wireless unit to the wireline unit; and

in response to Action B and prior to Action C, using the wireless number to determine the wireless unit is to receive the extension service by finding the wireless unit entry for the wireless unit in the table.

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